

Immunization Information Systems for a New Era

JANUARY 2014

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Welcome to SnapShots, AIRA's newsletter about the progress, best practices, and accomplishments of immunization information systems (IIS). We invite you to share news about your registry. Email aira@immregistries.org or call us at 202-527-7000 with information about a successful programmatic or technical innovation, major accomplishment, or milestone that your registry has reached.

Please share *SnapShots* with others who may benefit from a reliable source of immunization registry news and information.

SnapShots is produced quarterly by the AIRA Education Committee. TO SUBSCRIBE, send an email to aira@immregistries.org.
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SnapShots

IMMUNIZATION REGISTRY NEWS from AMERICAN IMMUNIZATION REGISTRY ASSOCIATION (AIRA)

PRESIDENT'S REPORT

Happy New Year everyone!! I hope your holiday season was filled with joy and merriment. As I reflect on the year past, it is clear to me that our members and business partners are what make AIRA such a special Association.

2013 presented many opportunities which our members enthusiastically embraced and collectively we developed creative and solid technological and business decisions as a community. To name a few: our community made recommendations for developing a public health registration web site to allow eligible providers and eligible hospitals to register their intent for stage 2 MU reporting; tightening up the HL7 implementation guide in preparation for stage 3 MU reporting; VTRCKS Fund Split requirements needing to be supported throughout the ExIS community; and exploratory conversations around potential opportunities to leverage joint software development initiatives to optimize resources.

I would be remiss not to mention the AIRA 2013 IIS National Meeting held last October in Denver, as it marked a major success for our community. The meeting theme of "Opportunities, Integration and Sustainability" is very real and goes beyond the 2013 meeting. It is one that I reflect on each day as I conduct AIRA business on your behalf.

This edition of *SnapShots* provides critical information about the current and upcoming areas that will impact the way we conduct our day to day business operating IIS. I encourage you to review the great articles that have been contributed by our members and to become active within your association.

Your Board of Directors has been active as well. During our October Board meeting we finalized the 2013-2016 AIRA Strategic Plan which charts the AIRA road map through 2016. The board had extensive conversation around what is intended by standardization and how AIRA can assist with message conformance by leveraging the status check project and what potential role AIRA should have in the governance process. I am very excited about message conformance and encourage each IIS to participate in this effort by evaluating your local jurisdictional messaging requirements with the current implementation guide. My hope for 2014 is for our community to reach consensus with zero variances to the current implementation guide.

I would like to take a moment to thank all of the Board, Committee members and AIRA Staff for their outstanding work this past year; they have all been wonderfully responsive to the needs of the association and served it well. I hope that each of our members will help ensure the continued growth of AIRA by embracing opportunities to be involved as well. Together, we will continue to forward AIRA's vision "to facilitate the sharing and use of immunization information by all partners and ensure that immunization information systems are fully supported and represented.

Sincerely,

Frank

— Submitted by Frank Caniglia (IIS Chief, PA), AIRA President

AIRA will
continue to be a
strong, unified
voice for
standards, policy
and funding as
well as
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staff.

AIRA Strategic Plan

The American Immunization Registry Association (AIRA) Board of Directors and staff met on March 12 and 13, 2013 in Portland, Oregon to discuss the needs of the organization and draft a strategic plan for the next three years. Participants discussed and reviewed the previous strategic plan, the cooperative agreement with the Centers for Disease Control and Prevention (CDC) and other background information. After this process, the group worked with a facilitator to draft:

- A new vision and mission statement,
- · Five specific goals for the new strategic plan, and
- 30 objectives under the specific goals

The Strategic Plan highlights AIRA's continued role in the promotion of the development and implementation of immunization information systems (IIS) and also focuses on increasing the organizations financial capacity and stability. Based on the new plan, AIRA will continue to be a strong, unified voice for standards, policy and funding as well as education/training for IIS managers and staff. AIRA will remain committed to sharing collective knowledge and successes, representing IIS programs on emerging public health issues that may impact IIS operations, identifying and representing IIS in evolving health information trends and ensuring advocacy for funding for IIS through legislation and policy development. Further, AIRA will continue to be committed to the development of strategic partnerships that it views as critical to the accomplishment of its vision and mission. To that end, AIRA will work to expand partnerships with key stakeholders, and cultivate relationships with other organizations that will assist AIRA in the achievement of its mission.

New Mission and Vision Statements:

AIRA's mission is "To promote and support the use of immunization information to ensure healthy communities." AIRA's vision is "To facilitate the sharing and use of immunization information by all partners and ensure that immunization information systems are fully supported and represented."

AIRA's activities are carried out by member's who participate on AIRA standing and/or ad hoc committees or workgroups. Current standing committees include the AIRA Board Executive Committee, the Bylaws Committee, the Nominating/Membership Committee, the Strategic Planning Committee, and the Finance Committee. Additional core committees are: the Education Steering Committee, the Standards and Interoperability Steering Committee, the Assessment Steering Committee, and the Modeling of Immunization Registry Operations Workgroup (MIROW). Active ad hoc non-standing committees currently include the Web Services and Real-Time Data Exchange Workgroup, and Provider Training Workgroup. The ad-hoc committees are involved in activities that support the organization's goals and objectives and address issues and initiatives that are more immediate in nature.

- GOAL 1: Maintain Role as Leading Authority
- Objective a. Develop and promote standards and best practices
- Objective b. Promote the use of IIS in support of immunization program core functions
- Objective c. Explore the benefits of IIS certification
- Objective d. Market AIRA as a leader
- Objective e. Represent IIS interests
- Objective f. Build relationships with partner organizations
- GOAL 2: Support Our Members
- Objective a. Assess member needs
- Objective b. Develop standards and best practices
- Objective c. Inform and educate members on standards, best practices and other potential solutions to identified needs
- Objective d. Support members implementing local solutions
- GOAL 3: Fully Engage Community and Partners
- Objective a. Increase AIRA membership
- Objective b. Engage and expand AIRA member participation
- Objective c. Increase AIRA participation in external partnerships
- Objective d. Engage and expand partner participation within AIRA
- GOAL 4: Increase Financial Capacity
- Objective a. Determine alternative funding sources
- Objective b. Develop a financial plan
- Objective c. Develop financial reporting strategies

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■ GOAL 5: Ensure Organizational Stability

Objective a. Develop and maintain an operational and staffing plan

Objective b. Diversify Board to create opportunities and strengthen partnerships

Objective c. Fully engage the IIS community as members and foster full participation in AIRA

AIRA Steering Committee Involvement

AIRA is always looking to increase member involvement and participation in association activities. The **Provider Training Workgroup**, a subcommittee of the AIRA Education Steering Committee, presented on this topic at the AIRA National Meeting held in Denver this past October. This presentation was an opportunity for attendees to learn more about all AIRA committees and hear from current committee members. And *SnapShots* readers – it is now your turn! Each committee has members with varying levels of activity and member co-chairs are always looking for more participation from people within in the IIS community. So even if you couldn't join us in Denver, please see if any of the committees outlined below interest you.

Visit the AIRA website to see the full strategic plan: www.immregistries.org/about-aira/organizational-documents. ■

- Assessment Steering Committee develops standards of excellence and indicators for a comprehensive selfassessment and measurement of process for overall IIS operations improvement.
- Education Steering Committee promotes standards and best practices through informational and educational activities, using both face-to-face meeting opportunities as well as electronic communications methods. This committee also provides oversight for the Provider Training Workgroup, a forum for the IIS community to discuss provider training needs.
- Modeling Immunization Registry Operations Workgroup (MIROW) Steering Committee develops best practice operational improvement guidebooks and to promotes the implementation of best practices in the IIS community. Membership in this committee is limited. When slots are open, a selection and review process is conducted by the committee co-chairs.
- Standards & Interoperability Steering Committee provides technical support and guidance to interoperability efforts of AIRA members and the IIS community. This committee also provides oversight for the Web Services & Real Time Data Exchange Workgroup, a forum for the IIS community to discuss technical and policy aspects of implementing web services for real time data exchange.

More information regarding each committee can be found on the AIRA website at www.immregistries.org/about-aira/committees. If you are interested in participating please contact the committee chair, co-chair, or any of the AIRA staff via email. AIRA staff emails can be found under the Contact Us link (www.immregistries.org/contact-us) on the top right section of the website.

— Submitted by Jenne McKibben (OR)

IIS Executive Board

n November 19, 2013, leadership at the Centers for Disease Control and Prevention (CDC) National Center for Immunization and Respiratory Diseases (NCIRD) convened the first meeting of a newly created Intergovernmental Immunization Information System (IIS) Executive Board. The charge of this Board is to provide input and feedback to NCIRD on strategic investments that will develop and strengthen the use of IIS to reduce vaccine preventable diseases and to provide insight on vaccine usage, coverage, trends and needs. Per the group's draft Charter, the Board will be responsible for providing input that will assist with updating and maintaining the NCIRD IIS Strategic Plan, while NCIRD's Immunization Services Division (ISD) will remain responsible for the day-to-day execution of the strategy.

The Board is made up of government-only employees from the local, state and federal level, including IIS managers Amy Metroka from New York City and Mary Beth Kurilo from Oregon, and Immunization Program Manager Marcella Bobinsky from New Hampshire, to represent the state perspective for IIS. The other members of the Board include representatives from the CDC Cancer Surveillance Program, Indian Health Services, Centers for Medicare & Medicaid Services, and Veteran's Affairs, along with Jim Daniel from the Office of the National Coordinator for Health Information Technology, Dr. Chesley Richards, former Director of NCIRD ISD and current Director of CDC's Office of Public Health Scientific Services, Jim Seligman, CDC's Chief Information Officer, Dr. Melinda Wharton, NCIRD ISD Director, Anjella Johnson-Hooker, Associate Director of Management and Operations within NCIRD, and Agha "Nabeel" Khan, Senior Advisor, NCIRD Office of Informatics. Gary Urquhart, Warren Williams, and Laura Pabst of the CDC IIS Support Branch participated as non-voting members.

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Learn more
about all AIRA
committees and
hear from
current
committee
members.

The Board will be responsible for providing input that will assist with updating and maintaining the NCIRD IIS Strategic Plan.

The meeting was facilitated by Anjella Johnson-Hooker. Dr. Anne Schuchat, Director of NCIRD, and other speakers stressed that IIS are a critical area of importance for CDC and for the health care community, and that CDC leadership is invested in ensuring the success of the IIS community. The heightened visibility of IIS because of the HITECH Act and Meaningful Use has highlighted both strengths and challenges within the IIS community. The input from the IIS Executive Board to NCIRD will help them prioritize funding decisions to build on the former and address the latter. Dr. Schuchat, in conveying her enthusiasm and hopes for this process, said, "This is our moonshot!"

The first meeting included a review of the proposed IIS Strategic Plan, which covered five significant focus areas that may represent potential areas for current and future investment:

- National Leadership
- Sustainability
- Public Health Services
- · Provider Services
- Interoperability

The next task for the IIS Executive Board will be to provide input on funding priorities, input which is needed by NCIRD leadership in January. Information about the content and direction of the IIS Executive Board and IIS Strategic Plan will be shared regularly with the AIRA membership as the group moves forward. AIRA leadership is committed to working closely with NCIRD to share additional input and community-wide expertise on priorities for the IIS community. For more information, please contact Mary Beth Kurilo (mary.beth.kurilo@state.or.us) or Amy Metroka (ametroka@health.nyc.gov).

— Submitted by Mary Beth Kurilo (OR) and Amy Metroka (NYC).

EHR Discovery Calls Impact Onboarding Outcomes: An IIS Vendor Perspective

State IIS (Immunization Information Systems) struggle to onboard providers using Electronic Health Record (EHR) applications due to various challenges. Despite these struggles there are many key points of potential failure that can be identified and mitigated at the beginning of an onboarding project. While processes are now in place in many EHR systems to ensure the data fields an IIS requires are populated, the field level validation to ensure the data is complete and correct is still often not there. However, there are many things that are under the end user's and local system administrator's control and the end users are very good at finding ways to out-smart their EHR system even when fields are mandatory.

After many years of working with various EHR vendors and EHR end users and discovering the causes for incomplete and incorrect data in HL7 imports, we know that changing user behavior is the most challenging barrier to a successful data exchange. End users may not know that critical fields are buried in a demographic section or those fields may be found in more than one place in their application. As an IIS vendor, we learned that instead of restrospectively diagnosing and fixing the sources of bad data, we benefited from changing our process to work pro-actively with the EHR and the end users.

During our initial discovery call, we request the participation of a "front office" or registration person who typically enters the patient demographic information into the EHR and a clinician who documents the vaccination event into the EHR. Using a web sharing application, they walk us through their workflow, entering or searching for a test patient and entering a vaccination event. If the provider does not show us the fields that the IIS requires we ask them to show us other areas in their EHR where the data may exist. Typical issues include where and how the minor patient's legal guardian and their relationship to the patient are documented and where VFC eligibility information is documented. We also review how both historical and administered vaccinations are documented in the EHR. Frequently only the vaccines the practice currently administers are available in a drop down choice list which makes documenting an older patient's vaccine history technically incorrect. The vaccine and manufacturer codes that are sent in the HL7 message are now frequently under a local administrative user's control; others are still hard coded by the vendor. Typically one or many of these codes will be wrong because the users don't know that there are official codes for vaccine manufacturers or they have not kept their versions updated. Many doses of PCV13 were entered as PVC7 long after it was no longer manufactured.

This discovery call takes about 30 minutes or less to complete. We do this for every practice that we onboard because many providers make custom changes to their EHR application and end user training on the EHR's functionality can vary. Many end users don't know all the things that their EHR can do to help them avoid mistakes. While this might sound like an onerous task, the workflow demonstration allows an opportunity to identify potential problem areas and work with the users and their EHR vendors to implement a cleaner immu-

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Instead of restrospectively diagnosing and fixing the sources of bad data, we benefited from changing our process to work pro-actively with the EHR and the end users.

nization interface before live patient data testing begins. Changes can include implementing drop downs rather than free text fields, updating vaccine and manufacturer codes, and utilizing inventory management in the EHR. Meaningful Use certified or not, EHR vaccination module functionality is not close to being the mini-IIS that many EHR end users expect it to be. There are many points of potential failure and partnering with end users to identify them and work with their vendors to fix functionality when necessary makes for a successful team and a successful interface with clean data.

— Submitted by Janet Balog, BS, RN. Sr. Public Health Advisor STC

EMR and IIS - Finding Common Ground

In the interoperability world for EMR vendors, currently one of the biggest struggles is the lack of standard-ization across immunization registries. While following provided specifications seems simple enough, developing interfaces to 50+ separate registries that all seem to want a different flavor of the same data has proven to be a difficult task. Our goal as an EMR vendor at the AIRA conference was to understand more the IIS registry needs, as well as voice our own from the EMR standpoint.

While at the AIRA conference, we were able to bring up many new ideas around our vaccine functionality and get wonderful feedback and suggestions. Many of the suggestions we received were things that had not been considered, which are now being worked into our functionality. Many others we were able to discuss with registries and explain why the idea would not be a viable option due to provider workflow, Meaningful Use requirements, etc.

After speaking with many different IIS vendors at the conference, it was clear that each side had many valid points. It was interesting, to say the least, how each region in our country desires different information, and the reasons why. Several IIS vendors had never considered that while they work with many EMR vendors, they also deal with their own specifications, whereas EMR vendors have to accommodate for each separate specification for each IIS. One thing was agreed on across the board: more collaboration is needed between IIS's and EMR's.

As a new AIRA member, this is a perfect opportunity for our EMR to become more involved in the progression of IIS's across the country. While more EMR vendors are still needed for more effective collaboration, this is a great start. Being able to voice EMR opinions and get involved in building the groundwork for new functionality will benefit not only the IIS's and EMR's, but patients and physicians as well.

— Source: Katie Odem, Greenway Medical

IIS HL7 Tester Released for Beta Use

In 2013 the Immunization Information Systems Support Branch (IISSB) of the Centers for Disease Control and Prevention (CDC) conducted an Immunization Information Systems (IIS) Interoperability Status Check project to test and verify that IIS HL7 interfaces were able to accept the 7 NIST test messages that certified EHR's must be capable of sending to IIS in 2014. The results of this project showed that IIS have made great progress in supporting HL7 2.5.1 standards but that still some work remained in order to bring all IIS in conformance to the same standard.

It was clear from this and other projects that there exists a need for a standardized and automated process for ensuring that an IIS HL7 interface meets national standards. So, in the summer and fall of 2013 the Open Immunization Software (OIS) project convened a set of technical meetings with representatives from five IIS to develop a testing process and software to test IIS HL7 interfaces. The goal was first to create a system for testing the Data Quality Assurance (DQA) system and second to create a standardized system that other IIS could use for internal testing.

The alpha version of this new testing process has been available since September, and already several IIS vendors and projects have been successfully using the software to find and fix conformance issues in their HL7 interfaces. The beta version has now been released and the entire IIS community is being invited to use the software in their testing process, both for testing purposes and to give feedback to OIS about improvements or fixes that can be made in preparation for the final stable release.

For more information please visit: http://openimmunizationsoftware.net/interfacing/IIS%20HL7%20Tester.html

— Submitted by: Nathan Bunker, Dandelion Software

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onc will provide technical assistance to help states interface with the hub.

ONC Immunization Registry Data Exchange Pilot Program

The Office of the National Coordinator for Health Information Technology (ONC) has launched a new immunization registry pilot program initiative. Participating pilot states will exchange immunization registry data through a data hub that will be developed by ONC. A list of pilot criteria has been established which includes, but is not exclusive to, the following:

- pilots must be able to support query response through bidirectional queries and must have a process to support acknowledgments;
- sharing immunization data with other pilot states must be allowed by state policy;
- pilots must have a business need to exchange data with other participating states; and,
- at least one state must have a consumer portal as a data exchange partner.

Once states agree to participate as pilot sites, they must use Immunization Information Systems (IIS) to initiate queries (i.e., the query is initiated at the provider EHR level, which flows to a data hub), and must have implemented the HL7 Immunization Implementation Guide V1.5 (to be released this winter). Pilots also must find consensus on the type and content of query and the type and content of response. The pilot states will additionally be expected to implement a new WSDL that is being developed by ONC and will be required to build interfaces with the data hub. The ONC data hub will not support multiple matches and there will be no transformation, translation, or reading of message content as it passes through the hub. While ONC will be unable to provide money for states to develop interfaces, ONC will provide technical assistance to help states interface with the hub.

ONC is additionally developing an alternative approach in which a state immunization registry looks up the endpoint of the target IIS and proceeds to query it directly, with both parties further communicating only with a centrally hosted authentication/authorization service in order to determine the authentication/authorization of the other party. While this approach has many advantages, ONC acknowledges that it requires additional financial investment by states compared with the data hub model.

ONC would be happy to provide additional information on this immunization registry data exchange initiative and welcomes discussion with states that are interested in serving as pilots. For additional information or to express interest in serving as a pilot site please contact James Daniel (James.Daniel@hhs.gov).

— Submitted by: James Daniel, HHS, ONC

ONC Holds Meeting on Patient Matching

n Monday, December 16, 2013 the Office of the National Coordinator for Health Information Technology (ONC) held a meeting dedicated to issues related to patient matching in healthcare. More than 200 individuals attended this meeting either in person or remotely. According to Lee Stevens, Director of State Health Information Exchange Policy, ONC is, "...beginning a collaborative project to help identify the common denominators and best practices being used by private sector health care delivery systems and Federal agencies. By identifying and recommending standardization of the basic attributes most commonly used for patient matching, we are looking to improve patient safety, care coordination and efficiency." Supported by Audacious Inquiry (Ai), a Maryland-based consulting company, ONC hopes to identify a core set of data that is most useful in matching patient records as well as best practices to make matching most effective.

Before the meeting, ONC distributed an Environmental Scan Overview, initial findings of Ai's preliminary research, and a list of sources. Slides from the meeting presentations were also distributed. These documents are posted on the AIRA website (http://www.immregistries.org/resources/data/data-quality) for your reference. AIRA will provide additional information on these efforts as they become available.

— Submitted by Noam H. Arzt, President, HLN Consulting, LLC, arzt@hln.com

ONC hopes to identify a core set of data that is most useful in matching patient records as well as best practices to make matching most effective.

Immunization programs are encouraged to leverage their Immunization Information Systems (IIS) to support this key program activity in lieu of CoCASA.

New AIRA Cooperative Agreement: Operational Guidelines for Immunization Programs and Immunization Information Systems (IIS) in IIS-AFIX Integration

Currently there are no consensus-based technical specifications or operational guidelines to assist immunization and IIS program awardees with the development and implementation of IIS-based coverage assessments. AIRA was awarded a cooperative agreement by the Centers for Disease Control and Prevention (CDC) to develop technical specifications and operational guidance for use by programs and IIS to use as guidance to make the necessary system enhancements as well as operational changes needed to achieve this objective.

In 2013 CDC announced that support for the software program developed and supported by CDC, Comprehensive Clinic Assessment Software Application (CoCASA), to perform coverage level assessments will be continued into the 2018-2021 Cooperative Agreement cycle. However, immunization programs are encouraged to leverage their Immunization Information Systems (IIS) to support this key program activity in lieu of CoCASA.

Undertaking a project of this size and scope could potentially overwhelm any one IIS program and could spark redundancy if all IIS programs need to create similar technical specifications, operational guidelines and modifications. AIRA is well positioned to develop best practice recommendations for this program operation, and will continue to update the membership as this work progresses.

Comments, problems, or questions?

We value your feedback! Contact AIRA at:



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Alison Chi, Program Manager AChi@immregistries.org

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NOT A MEMBER? JOIN AIRA TODAY!

American Immunization Registry Association (AIRA) offers membership to any individual or organization, both not-for-profit and for-profit, that shares and supports its mission of preventing and controlling vaccine preventable disease by enhancing the capacity of immunization information systems (IIS). Learn more at www.immregistries.org/membership